



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,610	03/14/2001	Robin E. Wright	56495US1A002	2868

32692 7590 12/19/2002

3M INNOVATIVE PROPERTIES COMPANY  
PO BOX 33427  
ST. PAUL, MN 55133-3427

EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
----------	--------------

1771

12

DATE MAILED: 12/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/808,610

Applicant(s)

WRIGHT, ROBIN E.

Examiner

Victor S Chang

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Rejections not maintained are withdrawn.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 19-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 19, line 3, the Examiner suggests to insert --opposing-- after "second" to better clarify the claim.

#### ***Response to Amendment***

5. Claims 19-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP SHO 50-10353 in view of Park (US 4151056).

For claims 19, 21-26, 29-31, and 33, JP '353 is directed to form a cured layer on the edge face of a roll of pressure-sensitive adhesive tape (page 2, paragraph 1 and 2). JP '353 teaches that edge face of roll of pressure-sensitive adhesive is coated with a solution containing a crosslinkable photosensitizer, or a crosslinkable photosensitizer

Art Unit: 1771

and a photoactive crosslinking agent and a vinyl-based polymer, then exposed to an irradiation to form a cured layer (page 4, paragraph 3). It is noted that JP '353 lacks the specific teaching of a edge face coating of reaction product of acrylate oligomer, polyetheracrylate oligomer, and optional monomer and photoinitiator. However, Park's invention is directed to a radiation curable coating composition (Abstract). Park teaches that it is known art that the radiation curable coating compositions typically contain a radiation reactive oligomer or resin, a radiation reactive diluent, a photoinitiator and, optionally a radiation reactive crosslinker (column 1, lines 18-21). Compounds containing acrylyl or methacrylyl groups have become by far the most widely used components of radiation curable coating compositions because of the ease and rapidity with which the acrylyl or methacrylyl groups undergo radiation-induced addition polymerization (column 1, lines 32-37). Park also teaches that it is well known monofunctional monomeric acrylate or methacrylate esters are generally employed as the radiation reactive diluent; monomeric polyfunctional acrylate or methacrylate esters are employed as the crosslinking agent; and oligomers or resins containing one or more acrylyl or methacrylyl groups are employed as the oligomer or resin component (column 1, lines 38-44). Further, Park teaches oligomers of polyetheracrylate as one of the many suitable radiation reactive oligomers and resins which are known to those skilled in the art (column 3, lines 26-32). As such, in the absence of unexpected results, it would have been obvious to one of ordinary skill in the art to use various alternative photo-curable acrylate oligomers and monomers, such as the acrylate monomers, oligomers and polyetheracrylate taught by Park as well known prior art to modify the

Art Unit: 1771

coating solution of JP '353, motivated by desire to obtain a solvent-free and rapidly photo-curable coating. It should be noted that Applicant repeatedly argues that the instant claimed invention is directed to a detackifying composition in prior Responses filed on 12/9/2002 and 8/15/2002, however, nowhere in the claims such "detackifying" property was claimed. The Examiner further asserts that curing (or setting) process inherently limits polymer chain mobility and renders a crosslinked and detackified polymer surface (see page 3, top paragraph of Paper No. 8), i.e., detackifying is inherent in a photocurable polymer system once it is fully cured. Note also as evidence that in Example 1, Park shows that the photo-curable compositions on the glass plate were cured to a solid, non-tacky state by 20 seconds of exposure to mercury arc lamps, and Park explains that this detackified composition indicated that most of the reactants are fully cured (column 6, lines 40-56).

With respect to claim 20, Park does not expressly teach the composition of the radiation curable adhesive, however, in the absence of unexpected results, it is believed that suitable composition ratio is either an inherent or an obvious optimization.

With respect to claims 27-28, matting agent such as silica is a common and well-known additive to one of ordinary skill in the art for modifying a coating glossiness. As such, in the absence of unexpected results, it would have been obvious to one of ordinary skill in the art to include the matting agent in a coating composition, motivated by the desire to control the surface glossiness.

With respect to claim 32, JP '353 does not state the coating remains adhered to the unwounded tape. However, it is believed that for a thin detackifying coating, it is an



Art Unit: 1771

inherent property for the coating to break at the tip of stress concentration, and consequently remains with the unwounded tape.

With respect to claims 34 and 35, in Application Example 1 (page 9, paragraph 6), JP '353 teaches applying the radiation curable coating onto both edge faces of an adhesive roll, and in Application Example 2 (page 10, paragraph 1), the coating is applied to one edge face only. Therefore, it would have also been obvious to one of ordinary skill in the art to apply a discontinuous coating only to suitable area on the edge surface, motivated by the desire to reduce the cost.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In addition, the following references are cited of interest for making radiation curable adhesive.

US 5118567 to Komiyama et al.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 703-605-4296. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Application/Control Number: 09/808,610  
Art Unit: 1771

Page 6

VSC  
December 11, 2002

DANIEL ZIRKER  
PRIMARY EXAMINER  
GROUP 1300-  
1700

*Daniel Zinker*